SHORT QUESTIONS

Q.1- What are the major types of bank accounts?

Ans. There are three Major types of bank accounts

(i) **Current Account:-**

This type of account is with highest degree of liquidity. Due to this quality, it is very Popular.

(ii) **Saving Account:-**

People keep this account to deposite their savings for long time. This kind of accounts are an important source of funds for the bank.

(ii) **Fixed Account:-**

This is a long time fixed account and a bank gets funds for long term lending and investment purposes.

Q.2- Define "Profit on deposit".

Ans. When a bank uses our money in some business, the bank pays some return for using our amount this return is called profit on deposit

Q.3- Explain the term "Mark up"

Ans. When some person borrows funds from a bank, he has to pay some extra amount for using the funds. This extra amount is called mark up.

Q.4- What is the difference between simple and compound interest?

Ans. Profit on principle amount is called simple interest. If profit or interest for one year is added to the principle

amount then this sum is considered principle for the next year and the interest on this kind of amount is called compound interset .

Q.5- What are the formulas to find simple and compound interest?

Ans. For simple profit, we use formula

$$\text{Simple Profit} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

For Compund Profit, the formula is

$$\text{Proncipal} + \text{Compound Profit} = \text{Principal}\left[\frac{100 + \text{Rate}}{100}\right]^{\text{Time}}$$

or $$\text{Final Amount} = \text{Principal}\left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

Q.6- Rs.4000 were invested at 5% for 3 years. Find the compound as well as simple profit.

Solution:-

Principal = Rs. 4000 , Time = 3 years

Rate = 5%

$$\text{Simple Profit} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

$$\frac{4000 \times 5 \times 3}{100} = 600 \text{ Ans.}$$

Now

$$\text{Proncipal} + \text{Compound Profit} = \text{Principal} \times \left[\frac{100 + \text{Rate}}{100}\right]^{\text{Time}}$$

$$\text{Final Amount} = 4000 \times \left[\frac{100 + 5}{100}\right]^3$$

$$= 4000 \times \frac{105}{100} \times \frac{105}{100} \times \frac{105}{100} = \text{Rs.}4630.50$$

$$\text{Copound Profit} = \text{Rs.}4630.50 - \text{Rs.}4000$$

$$= \text{Rs.}630.50 \text{ Ans.}$$

Q.7- Write the formulas to find the mark up on loan for annual, monthly or daily bases.

Ans. $$\text{Mark up (Per anum)} = \frac{\text{Amount Borroued} \times \text{Rate} \times \text{Years}}{100}$$

$$\text{Mark up (Per month)} = \frac{\text{Amount Borroued} \times \text{Rate} \times \text{Months}}{12 \times 100}$$

$$\text{Mark up (Per day)} = \frac{\text{Amount Borroued} \times \text{Rate} \times \text{Days}}{365 \times 100}$$

Q.8- What do you mean by insurance?

Ans. Insurance is an agreement between two parties where by a party agrees to pay an amount by installments to an insurance company and the company covess or indemnify the rises to the life or other thing for which the insurence is made.

Q.9- What do you mean by leasing?

Ans. Lease is a contract where by the owner of an asset gives the hires the right to use the asset for a specified period in exchange of rental payment.

Q.10- Define the term "Down Payment".

Ans. The payment deposited by the customer to the bank along with the application form is called "Down Payment".

SOLVED EXERCISES

EXERCISE 4.1

Q.1- Convert 250 US Dollars into sterling Pound.

Solution:-

Buying rate of 1 Us Dollar $= \text{Rs.}83.800$

Price of 250 US Dollars $= 250 \times 83.800 = \text{Rs.}20950$

Rate of 1 Pound $= \text{Rs.}129.7968$

There for

$$250 \text{ US Dollars} = \frac{20950}{129.2768} = 161.4060 \text{ Pounds}$$

Q.2- Convert 5000 Riyals into Pak rupee.

Solution:-

Price of 1 Riyal = Rs.22.3449 Pak Rupees

Price of 5000 Riyal = 5000×22.3449 Pak Rupees

= Rs.$1,11,724.5$

Q.3 An importer imports a car from Japan for 5000 Yen. Delivery was to be made after three months. At the time of contract Rs1 = 0.895236 Yen. At the time of delivery Rs 1 = 0.892236 Yen. Payment was made at the time of contract. Determine the profit or loss of the importer.

Solution:- At the time of contract

0.895236 Yen = Re 1

$$1 \text{ Yen} = \text{Rs} \frac{1}{0.895236}$$

$$5000 \text{ Yen} = \text{Rs} \frac{1}{0.895236} \times 5000$$

5000 Yen = Rs 5585.12

Similarly at the time of delivery

$$5000 \text{ Yen} = \text{Rs} \frac{1}{0.892236} \times 5000 \quad = \text{Rs } 5603.90$$

Therefore, Profit = Rs 5603.90 – Rs 5585.12 = Rs 18.78 Ans.

Q.4- A customer wants to convert 150 American dollers into rupees. He goes to an authorised dealer. He offers him conversion at the rate of 1 dollar = Rs.84.100. If it is converted with a money changer, the rate is 1 dollers = Rs.83.4495, determine the amount into rupees if it is converted with:

(i) Authorised dealer *(ii)* Money Changer

(iii) The loss due to conversion with the money changer.

Solution:-

Amount = 150 US Dollers

(i) For authorised dealer.

1 Doller = Rs 84.100

Thus 150 Dollers = Rs 150×84.100 = Rs. 12615 Ans.

(ii) For Money changer

1 Doller = Rs 83.4495

150 Dollers = Rs 150×83.4495 = Rs 12517.42

(iii) Loss due to conversion with the

Money changer = Rs $12615 - 12517.42$

= Rs 97.58 Ans.

Q.5- Rate of tea in Pakistan is Rs.21.0 per pound. Determine the rate per Kilogram, if

(i) $1kg = 2.2$ Pound

(ii) What will be the rate in Saudi Arabia if Saudi

1 Riyal = Rs. 22.400.

Solution:-

1 kg = 2.2 pounds

Rate of tea for 1 pound = Rs 21.00

(i) Rate of tea for 1 kg = Rs 21.00×2.2

= Rs 42.42

(ii) Now

Rs. $22.400 = 1$ Riyal

$$\text{Re.}1 = \frac{1}{22.400} \text{ Riyal}$$

$$\text{Rs.}42.42 = 42.42 \times \frac{1}{22.400}$$

= 1.89375 Riyal per kg. Ans.

Q.6- An exporter of carpets exports to England Carpets amounting to 40000 Sterling Pound. The spot buying rate exchange at that time was Rs.129.4542 to 1 Sterling. He receives the amount at the time when rate is Rs.129.0599 to 1 Sterling. How much he looses?

Solution:-

Amount = $40,000$ Sterling Pounds

At the time of exportation

1 Sterling Pound = Rs.129.4542

4000 Sterling Pound = 40000×129.4542

= 5178168 Pak Rupees

At the time of recieving amount

1 Sterling Pound = Rs.129.0599

4000 Sterling Pound = 40000×129.0599 = 5162396

Loss = 5178468 − 5162396 = Rs. 15772

Q.7- A Pakistani living in Saudi Arabia earns 4370 Riyals a month. His monthly expenses comes to 3450 Riyals. He remits his saving monthly to Pakistan. How much he saved in a year if rate of exchange is Rs.22.400 = 1 Saudi Riyals. After a year Rate of exchange is Rs.22.3004. Determine the loss due to monthly remitance.

Solution:-

Monthly earning = 4370 Riyals

Monthly expenses = 3450 Riyals

Monthly saving = 920 Riyals

Saving in a year = 920×12, = 11040 Riyals

Rate of exchange

1 Saudi Riyal = Rs.22.400

11040 Saudi Riyal = 11040×22.400

$= 247296$ Pak Rupees

After one year.

1 Saudi Riyal = Rs.22.3004

11040 Saudi Riyal = Rs.11040×22.3004

$= 246196.42$ Pak Rupees

His Profit = $247296 - 246196.42$

$= 1099.58$ Pak Rupees Ans.

Q.8- Rizwan purchases a car in Saudi Arabia for 15000 Riyals. Delivery was to be made after three months and payment is also to be made at the time of delivery. At the time of contract, the rate was 1 Riyal = Rs.22.400, while at the time of delivery the rate was 1 Riyal=Rs.22.0827. Determine the loss in rupees due to change in the rate.

Solution:- At the time of Contract

Rate of 1 Riyal = Rs.22.400

15000 Riyal = Rs.22.400×15000

$= 336000$ Pak Rupees

At the time of delivery

1 Riyal = Rs.22.0827 Rupees

15000 Riyal = Rs.$22.0827 \times 15000 = 331240.5$

Profit of Rizwan = $336000 - 331240.5$

$= 4759.5$ Pak Rupees

Q.9- A friend of Ali living in Saudi Arabia remits Ali 450 Riyals. The bank offers two conversions rate. T.T. Buying Rs.22.3449 = 1 Riyal T/C Buying Rate: Rs.22.2146 = 1 Riyal Which one of the rate will be applicable and also calculate the amount in rupees.

Solution:-

T.T Buying Rs.$22.3449 = 1$ Riyal

and T/c Buying Rate Rs.$22.2146 = 1$ Riyal

As TT Buying rate is more than T/c Buying rate. So TT buying is applicable. Ali's freind will buy TT.

He will get Pak rupees $= 22.3449 \times 450$

$= 10055.20$ Ans.

EXERCISE 4.2

Q.1- A financial institution charges Rs.55 simple profit on a sum of money which is borrowed for five months. Given that the rate of profit is 12% per annum, find the sum of money.

Solution:- We are given that

Simple Profit = Rs55

Time $= 5$ months $= \frac{5}{12}$ Years

Rate $= 12\%$ Per annum

Principal = ?

$$\text{Principal} = \frac{100 \times \text{Simple Profit}}{\text{Rate} \times \text{Time}} = \frac{100 \times 55}{12 \times \frac{5}{12}}$$

$$= \frac{100 \times 55}{5} = 1100 \text{ Rupees Ans.}$$

Q.2- Mrs.Javed invests in Savings Scheme Rs.800 at 6% per annum and Rs.1,200 at 7% per annum. What is her total amount of profit on these two investments?

Solution:- For first investment

$$\text{Simple Profit} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

$$= \frac{800 \times 1 \times 6}{100} = \text{Rs}48$$

For the 2nd investemnt.

$$\text{Simple Profit} = \frac{1200 \times 7 \times 1}{100} = \text{Rs}84$$

$$\text{Total Profit} = 48 + 84 = \text{Rs}132 \text{ Ans.}$$

Q.3- How long would Rs.1.250 have to be deposited at 6% per year simple profit to gain Rs.750 simple profit?

Solution:-

$$\text{Simple Profit} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

$$\text{Time} = \frac{\text{S.P} \times 100}{\text{Principal} \times \text{Rate}}$$

$$= \frac{750 \times 100}{1250 \times 6} = 10 \text{years. Ans.}$$

Q.4- Ali lent to Abid Rs.4,800 for 7 months. At the end of this period Abid had to pay Ali profit of Rs.119. What was the rate of simple profit per annum?

Solution:-

$$\text{Rate} = \frac{\text{Simple Profit} \times 100}{\text{Principal} \times \text{Time}} = \frac{119 \times 100}{4800 \times \frac{7}{12}}$$

$$= \frac{119 \times 100}{400 \times 7} = \frac{17}{4} = 4.25\% \text{Per year}$$

Q.5- In a certain year, Javed puts Rs.600 in a private bank at the end of March and Rs.400 in the same bank at the end of June. The bank offers 3% per annum simple profit rate. Find the total amount Javed receives from the bank at the end of December in that year?

Solution:- Javed invested Rs.600 for

9 months or $\frac{9}{12}$ years.

$\therefore$ Profit for Rs.600

$$= \frac{6\cancel{00} \times 3 \times \frac{9}{12}}{1\cancel{00}}$$

$$= 6 \times \frac{9}{4} = \frac{27}{2} = 13.5 \quad = \text{Rs}13.5$$

He invested Rs.400 for 6 months.

Or $\frac{6}{12} = \frac{1}{2}$ year

$$\therefore \text{Profit for Rs.}400 = \frac{4\cancel{00} \times 3 \times \frac{1}{2}}{1\cancel{00}} = \text{Rs}6.$$

Total Profit $= \text{Rs.}13.5 + \text{Rs.}6 = \text{Rs.}19.5$

Thus

Javed will recieve the total amount

$= \text{Rs.}600 + \text{Rs.}400 + \text{Rs.}19.5$

$= \text{Rs}1019.5$ *Ans.*

Q.6- At what annual rate of profit would a sum of Rs.680 will increase to Rs.850 in 3 years and 4 months?

Solution:-

Principal $= \text{Rs}680$

Time $= 3$ years and 4 months $= 3\frac{4}{12}$ years $= \frac{10}{3}$ years.

Rate $= ?$

Total Profit $= \text{Rs.}850 - \text{Rs.}680 = \text{Rs.}170$

Thus

$$\text{Rate} = \frac{\text{Profit} \times 100}{\text{Principal} \times \text{Time}} = \frac{17\cancel{0} \times 100}{68\cancel{0} \times \frac{10}{3}}$$

$$= \frac{3 \times 100}{4 \times 10} = \frac{30}{4} = 7.50\% \text{ P.A Ans.}$$

Q.7- Copy and complete the following table with the help of formula given in this unit?

Solution:-

	Principle	Profit rate	Time	Simple Profit	Amount
(a)	Rs.12,000	8%	7 years	Rs.6720	Rs.18720
(b)	Rs.500	11%	4 years	Rs.220	Rs.720
(c)	Rs.300	9%	4 years	Rs.108	Rs.408
(d)	Rs.3000	4%	10 years	Rs.1,200	Rs.4200
(e)	Rs.3600	5%	2 years	Rs.360	Rs.3,960
(f)	Rs.1,800	7%	18 Month	Rs.189	Rs.1,989
(g)	Rs.4,500	6%	2 years	Rs.540	Rs.5,040
(h)	Rs.1200	5%	$1\frac{1}{2}$ years	Rs.90	Rs.1,290

Q.8- A bank increased the rate of profit from 3.5% to 4% per annum. Find how much more profit Saeed would receive if he deposited Rs.6400 in the bank for 6 months at the new profit rate.

Solution:- At the old profit rate

$$\text{Profit} = \frac{6400 \times \frac{1}{2} \times 3.5}{100}$$

$$= 32 \times \frac{7}{2} = \text{Rs}112$$

At new Profit rate

$$\text{Profit} = \frac{6400 \times \frac{1}{2} \times 4.0}{100}$$

$$= 32 \times 4 = \text{Rs.}128$$

The amount of more Proift $= \text{Rs.}128 - \text{Rs.}112 = \text{Rs.}16$ Ans.

Q.9- **Mrs. Jamshed invested Rs.4000 in XYZ Bank Limited which paid simple profit at a rate $7\frac{1}{4}\%$ per annum to its investors. After 2 years, the rate was increased to 8% per annum. Find the amount she had at the end of 7 years.**

Solution:-

$$\text{Profit of first two years} = \frac{4000 \times 7\frac{1}{4} \times 2}{100}$$

$$= 40 \times \frac{29}{4} \times 2 = \text{Rs.}580$$

$$\text{Profit of last 5 years} = \frac{4000 \times 8 \times 5}{100} = \text{Rs.}1600$$

$$\text{Total Proift} = \text{Rs.}1600 + \text{Rs.}580 = \text{Rs.}2180 \text{ Ans.}$$

$$\text{Total Amount she had} = 4000 + 2180 = \text{Rs.}6180 \text{ Ans.}$$

Q.10- **Mr.Dawood deposits a certain sum of money in ABC Limited. If the profit rate of the bank decreases from $3\frac{3}{4}\%$ per annum to $3\frac{1}{2}\%$ per annum, Mr. Dawood's profit will decrease by Rs.50 in a years. Find the sum of money he deposits.**

Solution:-

$$\text{Difference of two rates} = 3\frac{3}{4} - 3\frac{1}{2} = \frac{1}{4}\%$$

Therefore Profit is decreased by Rs.50 at the rate of $\frac{1}{4}\%$ during one year. Thus

$$\text{Principal} = \frac{\text{Profit} \times 100}{\text{Time} \times \text{Rate}}$$

$$= \frac{50 \times 100}{1 \times \frac{1}{4}} = 5000 \times 4 = 20,000$$

Principal = Rs.20000 Ans.

Q.11- Find the compound profit on.

(i) Rs.450 for 2 years at 10% per annum compounded yearly;

(ii) Rs.700 for 3 years at 11% per annum compounded yearly;

(iii) Rs.5000 for 2 years at $11\frac{3}{4}$ per annum compounded yearly;

(iv) Rs.1200 for 3 years at 4% per annum compounded yearly;

(v) Rs.10000 for 3 years at $7\frac{1}{2}$ per annum compounded yearly;

Solution:-

(i) $$\text{Final Amount} = P \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$\text{Final Amount} = 450 \times \left[1 + \frac{10}{100}\right]^2$$

$$= 450 \times (1.1)^2$$

$$= 450 \times (1.21) = 544.5$$

Compound Profit = Final Amount – Principal

$$= 544.5 - 450 = \text{Rs.}94.50 \text{ Ans.}$$

(ii) $$\text{Final Amount} = \text{Princpal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 700 \times \left[1 + \frac{11}{100}\right]^3$$

$$= 700 \times (1.11)^3$$

$$= 700 \times (1.3676) = 957.34$$

$$\text{Compound Profit} = \text{Final Amount} - \text{Principal}$$

$$= \text{Rs.}957.34 - \text{Rs.}700$$

$$= \text{Rs.}257.34 \text{ Ans.}$$

(iii) $$\text{Final Amount} = \text{Princpal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 5000 \times \left[1 + \frac{11.75}{100}\right]^2$$

$$= 5000 \times (1.1175)^2$$

$$= 5000 \times (1.2488) = 6244.03$$

$$\text{Compound Proift} = \text{Rs.}6244.03 - \text{Rs.}5000$$

$$= \text{Rs.}1244.03 \text{ Ans.}$$

(iv) $$\text{Final Amount} = \text{Princpal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 1200 \times \left[1 + \frac{4}{100}\right]^3$$

$$= 1200 \times (1.04)^3 = 1200 \times (1.1249)$$

$$= \text{Rs.}1349.88$$

$$\text{Compound Profit} = 1349.88 - 1200 = 149.88$$

(v) $$\text{Final Amount} = \text{Princpal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 10000 \times \left[1 + \frac{7.50}{100}\right]^3$$

$$= 10000 \times (1.075)^3 = 10000(1.2423)$$

$$= \text{Rs.}12422.97$$

$$\text{Compound Profit} = \text{Final Amount} - \text{Principal}$$

$$= \text{Rs.}12422.97 - 10000$$

$$= \text{Rs.}2422.97 \text{ Ans.}$$

Q.12- Waseem invests Rs.5000 at $5\frac{1}{4}\%$ per annum profit compounded annually. Find the amount at the end of the third year.

Solution:-

At the end of the third year.

$$\text{Total Amount} = \text{Princpal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 5000 \times \left[1 + \frac{5.25}{100}\right]^3$$

$$= 5000 \times (1.0525)^3$$

$$= 5000 \times (1.1659)$$

$$= \text{Rs.}5829.57\ Ans.$$

Q.13- Javed invests Rs.800 at $12\frac{1}{2}\%$ per annum compound profit compounded half-yearly. What is the amount at the end of the first year?

Solution:-

Principal = Rs.800, Rate $= 12\frac{1}{2}\% = 12.50\%$ PA

Time = One year

= 2 terms of half years.

Because Profit is Compounded half yearly

So Rate = 6.25 half yearly.

$$\text{Final Amount} = \text{Princpal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 800 \times \left[1 + \frac{6.25}{100}\right]^2$$

$$= 800 \times (1.0625)^2$$

$$= \text{Rs.}903.13\ Ans.$$

Q.14- Mr.saleem invests Rs.9000 at 2% per annum compound profit compounded daily. What is his amount at the end of the third day.

Solution:-

Principal = Rs.*9000*

Rate = *2%* Per annum.

Time = *3* Days.

As the Profit is compounded daily

So Rate $= \frac{2}{365}\%$ Daily.

$$\therefore \text{Final Amount} = 9000 \times \left[1 + \frac{\frac{2}{365}}{100}\right]^3$$

$$= 9000 \times \left[1 + \frac{2}{36500}\right]^3$$

$$= 9000 \times (1.0000548)^3$$

$$= \text{Rs.}9001.48 \; Ans.$$

EXERCISE 4.3

Q.1- A man borrowed Rs.1460 from ABC Bank on the 3rd of March at $12\frac{1}{2}\%$ What should he pay on the 1st of July to pay off the debt.

Solution:-

Principal = Rs.*1460*.

Rate $= 12\frac{1}{2}\% = 12.50\%$ P.A.

Time = 3rd of March to 1st of July.

$= 121$ days $= \frac{121}{365}$ years.

$$\text{Mark up} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

$$= \frac{1460 \times 121 \times 12.50}{365 \times 100} = \text{Rs.}60.5$$

Thus Total amount = Principal + Mark up

$= \text{Rs.}1460 + \text{Rs.}60.5 = \text{Rs.}1520.5$ *Ans.*

Q.2- A shopkeeper borrowed Rs.3540 from ABC Bank at $10\frac{3}{4}\%$ and lent the whole amount at $11\frac{1}{2}\%$ on the same day, what would he gain from this after 3 years and 4 months.

Solution:- Principal = Rs.3540

$\text{Rate} = 10\frac{3}{4}\% \text{ P.A.} = 10.75 \text{ P.A.}$

Time = 3 year and 4 months.

$= 3\frac{4}{12} \text{ years} = \frac{10}{3} \text{ years.}$

$$\text{Bank's Mark up} = \frac{\text{Principal} \times \text{Rate} \times \text{Time}}{100}$$

$$= \frac{3540 \times 10.75 \times \frac{10}{3}}{100}$$

$$= \frac{3540 \times 10.75 \times 10}{100 \times 3} = \text{Rs.}1268.50$$

$$\text{Profit gained by him} = \frac{3540 \times 11.50 \times 10}{100 \times 3} = \text{Rs.}1357$$

He will given = Rs.1357 – Rs.1268.50 = Rs.88.50 Ans.

Q.3- XYZ Bank gained Rs.8034 on its loan at 6% compound markup in 2 years. What amount did it lend?

Solution:-

Let us suppose the Principal amount is Rs.100. Then

$$\text{Final Amount} = 100 \times \left[1 + \frac{6}{100}\right]^2$$

$$= 100 \times (1.06)^2$$

$$= 100 \times (1.1236)$$

$$= \text{Rs.}12.36$$

$$\text{Compound Profit} = \text{Final Amount} - \text{Principal}$$

$$= \text{Rs.}112.36 - \text{Rs.}100$$

$$= \text{Rs.}12.36$$

So For the Profit of Rs.12.36, loan = Rs.100

For the Profit of Rs.1, loan = Rs.$\frac{100}{12.36}$

For the Profit of Rs.8034, loan = Rs.$\frac{100}{12.36} \times 8034$

= Rs.65000 *Ans.*

Q.4- A Company borrowed Rs.6,600 from ABC Bank Ltd at 8% simple markup per annum. How much did the company owe to the bank at the end of 11 months?

Solution:-

Principal Amonunt = Rs.6,600

Rate = Simple Markup 8% P.A.

$$\text{Time} = 11 \text{ months} = \frac{11}{12} \text{ years.}$$

$$\text{Simple Mark up} = \frac{\text{Principal} \times \text{Rate} \times \text{Time}}{100}$$

$$= \frac{6600 \times 8 \times 11}{100 \times 12} = \text{Rs.}484$$

$$\text{Total amount} = \text{Principal} + \text{Mark up}$$

$$= \text{Rs.}6600 + \text{Rs.}484$$

$$= \text{Rs.}7084 \ \textit{Ans.}$$

Q.5- XYZ Bank charges 2.25% per month simple markup on personal loans. If Ali borrows Rs.6,400 for a period of 2 years 1 month, find the total markup he has to pay to XYZ Bank.

Solution:-

Principal amount = Rs.6,400

Rate of Simple Markup = 2.25% Per Month.

Time = 2 years 1 month = 25 Months.

$$\text{Simple Mark up} = \frac{\text{Principal} \times \text{Rate} \times \text{Time}}{100}$$

$$= \frac{64\cancel{00} \times 2.25 \times 25}{\cancel{100}}$$

$$= 64 \times 2.25 \times 25 = \text{Rs.}3600 \text{ Ans.}$$

Q.6- Find out the compound markup on Rs.250,000 for one year @ 14 % compounded annually.

Solution:-

Principal = Rs.250,000, Time = 1 year

Compouned Markup rate = 14% P.A.

$$\text{Total Amount} = \text{Principal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 250,000 \times \left[1 + \frac{14}{100}\right]^{1}$$

$$= 250,000(1.14) = \text{Rs.}285,000$$

Mark up = Total amount – Principal

= Rs.285,000 – 250,000

= Rs.35000 Ans.

Q.7- Find compound profit on Rs.600 for 4 years at 6 percent per annum.

Solution:-

Principal = Rs.600, Time = 4 years.

Compouned Profit rate = 6% P.A.

$$\text{Total Amount} = \text{Principal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 600 \times \left[1 + \frac{6}{100}\right]^{4}$$

$$= 600(1.06)^{4} = 600(1.262477)$$

$$= \text{Rs.}757.49$$

Compound Profit = Rs.757.49 − 600 = Rs.157.49 *Ans.*

Q.8- Find the compound profit of Rs.50000 at 4% for $1\frac{1}{2}$ years.

Solution:-

Principal = Rs.50,000

Rate = 4% P.A.

Time = $1\frac{1}{2}$ years.

$$\text{Total Amount} = \text{Principal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 50,000 \times \left[1 + \frac{4}{100}\right]^{1\frac{1}{2}}$$

$$= 50,000 \times \left[1 + \frac{4}{100}\right]\left[1 + \frac{2}{100}\right]$$

$$= 50,000(1.04)(1.02) = \text{Rs.}53040$$

Compound Profit = Rs.53040 − Rs.50000

= Rs.3040 *Ans.*

Q.9- Find the compound profit on Rs.54000 for one year at 12% per annum.

Solution:-

$$\text{Total Amount} = \text{Principal} \times \left[1 + \frac{\text{Rate}}{100}\right]^{\text{Time}}$$

$$= 54,000 \times \left[1 + \frac{12}{100}\right]^1$$

$$= 54,000 \times (1.12) = \text{Rs.}60480$$

Compound Profit $= \text{Rs.}60480 - \text{Rs.}54000$

$= \text{Rs.}6480$ *Ans.*

EXERCISE 4.4

Q.1- If the amount of premium is calculated as.

Yearly premium = @ *4.5%* of the policy income + policy fee @ *0.25%* of the policy amount or at the most Rs.*200*.

Half yearly premium @ *52%* of yearly premium.

Quarterly premium @ *27%* of yearly premium.

Monthly premium @ *9%* of yearly premium.

Then complete the table below for calculation of the premiums.

Also find the total amount he pays to the company.

Amount of policy	*Yearly premium*	*Half yearly premium*	*Quarterly premium*	*Monthly premium*
(i) 50,000				
(ii) 100,000				
(iii) 150,000				
(iv) 200,000				

Solution:-

(i) Amount of Policy = Rs.*50,000*

Yearly premium @*4.5%* $= \text{Rs.}\frac{4.5}{100} \times 50000 = \text{Rs.}2250$

Policy Fee @ *0.25%* $= 50000 \times \frac{0.25}{100} = \text{Rs.}125$

Total amount of yearly Premium $= \text{Rs.}2250 + \text{Rs.}125$

$= \text{Rs.}2375$ Ans.

Half yearly Premium = 52% of yearly Premium

$$= \frac{52}{100} \times 2375 = \text{Rs.}1235 \text{ Ans.}$$

Quaterly Premium $= \text{Rs}\frac{27}{100} \times 2375 = \text{Rs.}641.50$ Ans.

Monthly Premium $= \frac{9}{100} \times 2375 = \text{Rs.}213.75$ Ans.

(ii) Amount of Policy = Rs.100,000

Yearly premium @4.5% $= \text{Rs.}\frac{4.5}{100} \times 100000$

$= \text{Rs.}4500$ Ans.

Policy Fee @ 0.25% $= \frac{0.25}{100} \times 100000 = 250 > 200$

Thus Policy fee = 200

Total amount of yearly Premium = 4500 + 200

= Rs.4700.00 Ans.

Half yearly Premium $= \frac{52}{100} \times 4700 = \text{Rs.}2444.00$ Ans.

Quaterly Premium $= \text{Rs}\frac{27}{100} \times 4700 = \text{Rs.}1269.00$ Ans.

Monthly Premium $= \frac{9}{100} \times 4700 = \text{Rs.}423.00$ Ans.

(iii) Amount of Policy = Rs.150,000

yearly Premium $= \frac{4.5}{100} \times 150000 = 6750.00$

Policy fee = Rs.200.00

Total amount of yearly Premium = 6750 + 200

= Rs.6950.00 Ans.

Half yearly Premium $= \frac{52}{100} \times 6950 = \text{Rs.}3614$ Ans.

Quaterly Premium $= Rs \frac{27}{100} \times 6950 = Rs.1876.50$ Ans.

Monthly Premium $= \frac{9}{100} \times 6950 = Rs.625.30$ Ans.

(iv) Amount of Policy $= Rs.200000.00$

yearly Premium $= \frac{4.5}{100} \times 200000 = 9000 = 200$

Total yearly Premium $= 9000 + 200 = Rs.9200.00$ Ans.

Half yearly Premium $= \frac{52}{100} \times 9200 = Rs.4784.00$ Ans.

Quaterly Premium $= Rs \frac{27}{100} \times 9200 = Rs.2484.00$ Ans.

Monthly Premium $= \frac{9}{100} \times 9200 = Rs.828.00$ Ans.

Q.2- Calculate the amount to be received by the heirs of an insured if he died 2 years after buying the policy while.

The amount of policy = Rs.50,000

Premium is fixed @ 4.2% yearly

Policy fee @ 0.3%

Family income contract @ 0.6%

Maturity period = 22 years

Bonus @ 4.5% and Rs.6000 yearly income is promised by the company.

Solution:-

Policy Amount = Rs.50,000.00

Bonus for two years @4.5% $= \frac{50000 \times 4.5 \times 2}{100}$

$= 4500$

The family will get 6,000 yearly as income for next 20 years.

Total family income. $= 6000 \times 20 =$ Rs.$120,000$

Total Amount $= 50,000.00 + 4500 + 120,000$

$=$ Rs174500 Ans.

Q.3- Mr. Ahmed Ali insured his house worth Rs.75,00,000 @ 2% for 4 years calculae the amount paid in 4 years, while the rate of depreciation is 10% yearly.

Solution:-

Amount of Policy $=$ Rs.$75,00,000$

Ist Premium $@2\% = \frac{2}{100} \times 75,00,000 = 1,50,000$

Depreciation $@10\% = \frac{10}{100} \times 75,00,000 = 7,50,000$

Value of house after one year.

$= 75,00,000 - 7,50,000$

$=$ Rs.$67,50,000$

$2nd$ Premium $@2\% = \frac{2}{100} \times 67,50,000 =$ Rs.$1,35,000$

After two years

Depreciation $@10\% = \frac{10}{100} \times 67,50,000 =$ Rs.$6,75,000$

Depreciation value $=$ Rs.$(67,50,000 - 6,750,00)$

$=$ Rs.$60,75,000$

$3rd$ Premium $@2\% = \frac{2}{100} \times 60,75,000$

$=$ Rs.$1,21,500$

After 3 year

$4th$ Premium $= 0$

Total amount paid in 4 years

$=$ Rs.$(150,000 + 135,000 + 121,500 + 0)$

$=$ Rs.406500 *Ans.*

Q.4- Mr. Nadeem insured his shop @3% for 3 years, the depreciation rate is 5% yearly. If he paid an amount of Rs.21000 as the 1st premium, what is the worth of his shop. If he got a claim of Rs.200,000 after two years, how much benefits did he get?

Solution:-

3% of worth of shop $= 1st$ Premium

$\therefore \quad \frac{3}{100}$ of worth of shop $=$ Rs.2100

$\therefore \quad$ Worth of shop $= \frac{100}{3} \times 21000 =$ Rs.$700,000$

After one year

Depreciation @$5\% = \frac{5}{100} \times 700000 =$ Rs.$35,000$

Depreciated value $=$ Rs.$(700,000 - 35000)$

$=$ Rs.665000

$2nd$ Premium @$3\% = \frac{3}{100} \times 665,000 =$ Rs.19950

Total amount paid in 2 years $=$ Rs.$(21000) + (19950)$

$=$ Rs.40950

Amount of claim $=$ Rs.$200,000$

Benefits $=$ Rs.$(200,000 - 40950) =$ Rs.159050 *Ans.*

Q.5- Mr. Adil bought a running business worth Rs.10,00,000 and got it insured @2.5% as yearly premium for 4 years. After 3 years he got a claim of Rs.500,000 for actual damages. How much loss had he recovered through insurance?

Solution:-

Amount of Policy $=$ Rs.$10,00,000$

$1st$ Premium @$2.5\% = \frac{2.5}{100} \times 10,00,000$

$= \text{Rs.}25,000$

Depreciation $@10\% = \frac{10}{100} \times 10,00,000$

$= \text{Rs.}1,00,000$

Depreciated value $= \text{Rs.}(10,00,000 - 1,00,000)$

$= \text{Rs.}9,00,000$

$2nd$ Premium $@2.5\% = \frac{2.5}{100} \times 9,00,000 \quad = \text{Rs.}22,500$

After 2 years.

Depreciation $@10\% = \frac{10}{100} \times 9,00,000 \quad = \text{Rs.}90,000$

Depreciated value $= \text{Rs.}(9,00,000 - 90,000)$

$= \text{Rs.}8,10,000$

$3rd$ Premium $@2.5\% = \frac{2.5}{100} \times 8,10,000 \quad = \text{Rs.}20,250$

After 3 years.

Total amount paid as Premiums $=$

$= \text{Rs.}(25,000 + 22500 + 20250) \quad = \text{Rs.}67750$

Claim Recieved $= \text{Rs.}5,00,000$

Mr. Adil recovered $= \text{Rs.}(5,00,000 - 67,750)$

$= \text{Rs.}4,32,250 \; Ans.$

Q.6- Mr. Javeed bought an insurance policy against his car worth Rs.8,50,000, @ 4.25% for 3 years. What total amount will he pay as premium, if he had not claimed and damages during the period? Where depreciation is 10%.

Solution:-

Amount of Policy $= \text{Rs.}8,50,000$

$1st$ Premium $@4.5\% = \frac{4.5}{100} \times 8,50,000 \quad = \text{Rs.}36,125$

After one year,

$$\text{Depreciation @}10\% = \frac{10}{100} \times 8,50,000 = \text{Rs.}85,000$$

$$\text{Depreciated value} = \text{Rs.}(8,50,000 - 85,000)$$

$$= \text{Rs.}7,65,000$$

$$2nd \text{ Premium @}4.25\% = \frac{4.25}{100} \times 7,65,000$$

$$= \text{Rs.}32512.50$$

$$3rd \text{ Premium} = 0$$

$$\text{Total payment} = \text{Rs.}(36,125 + 32,512.50)$$

$$= \text{Rs.}68637.50$$

Q.7- Mr. Rehman bought a vehicle worth Rs.7,50,000. He got it insured @3.5% for 5 years. How much he paid in total for covering the risks, if he had got a claim of damages worth Rs.100,000 during the period? Where depreciation is 10%.

Solution:-

$$\text{Value of vehicle} = \text{Rs.}7,50,000$$

$$1st \text{ Premium @}3.5\% = 7,50,000 \times \frac{3.5}{100} = \text{Rs.}26250$$

After one year,

$$\text{Depreciation @}10\% = \frac{10}{100} \times 7,50,000 = \text{Rs.}75,000$$

$$\text{New value} = \text{Rs.}(7,50,000 - 75,000) = \text{Rs.}6,75,000$$

$$2nd \text{ Premium @}3.5\% = \frac{3.5}{100} \times 6,75,000 = \text{Rs.}23625$$

After 2 years.

$$\text{Depreciation @}10\% = \frac{10}{100} \times 6,75,000 = \text{Rs.}6,75,00$$

$$\text{New value} = \text{Rs.}(6,75,000 - 67,500) = \text{Rs.}60,75,00$$

$$3rd \text{ Premium @}3.5\% = \frac{3.5}{100} \times 60,75,00 = \text{Rs.}21262.50$$

After 3 years.

$$\text{Depreciation @}10\% = \frac{10}{100} \times 60,75,00 = \text{Rs.}60750$$

$$\text{New value} = \text{Rs.}(6,07,500 - 60750) = \text{Rs.}546750$$

$$4th\ \text{Premium @}3.5\% = \frac{3.5}{100} \times 546750 = \text{Rs.}19136.25$$

$$5th\ \text{Premium} = 0$$

$$\text{Total payment} = \text{Rs.}(26,250 + 23,625 + 21262.50 + 19136.25)$$

$$= \text{Rs.}90273.75$$

$$\text{Claim Recieved} = \text{Rs.}1,00,000$$

$$\text{Benefit} = \text{Rs.}(1,00,000 - 90273.75) = \text{Rs.}9726.25\ Ans.$$

Q.8- Ms. Maria bought an insurance policy @3.25% for her car for 3 years. Her 1st premium is Rs.26000. Tell the price of her car. Also calculate the amounts of her 2nd and 3rd premium.

Solution:-

$$1st\ \text{Premium} = \text{Rs.}26000$$

$$\therefore\ 3.25\% \text{ of Price of car} = \text{Rs.}26000$$

$$\text{Price of car} = 26000 \times \frac{100}{3.25}$$

$$= \frac{26000 \times 100 \times 100}{325} = \text{Rs.}8,00,000 \text{ Ans.}$$

After one year,

$$\text{Depreciation @}10\% = \frac{10}{100} \times 8,00,000$$

$$= \text{Rs.}80,000$$

$$\text{New value} = \text{Rs.}(8,00,000 - 80,000) = \text{Rs.}7,20,000$$

$$2nd\ \text{Premium @}3.25\% = \frac{3.25}{100} \times 7,20,000$$

$$= \text{Rs.}23400 \text{ Ans.}$$

$$3rd\ \text{Premium} = 0 \text{ Ans.}$$

EXERCISE 4.5

Q.1- For each of the following.

(i) find the additional amount you have to pay by financing and

(ii) express the additional amount obtained in as a percentage of the cash price:

		Financing Term			
Cash(Rs.)		Down(Rs.)	Monthly instalment(Rs.)	Number of instanlments
(a)	Rs.360	Rs.50	Rs.40	10
(b)	Rs.900	Rs.150	Rs.75	12
(c)	Rs.25000	Rs.10000	Rs.500	36

Solution:-

(a) Cash Price = Rs.360

Down Payment = Rs.50

Payment by instalments = Rs.40×10

= Rs.400

Total Payment = Rs.400 + Rs.50 = Rs.450

Additional Amount = Payment − Cash Price.

= (450 − 360) = Rs.90 Ans.

Percentage of Cash Price $= \frac{90}{360}\times 100 = 25\%$ Ans.

(b) Cash Price = Rs.900

Down Payment = Rs.150

Payment by instalments = Rs.75×12 = Rs.900

Total Payment = Rs.900 + Rs.150 = Rs.1050

Additional Payment = Rs.(1050 − 900) = Rs.150 Ans.

Percentage of Cash Price $= \frac{150}{900}\times 100 = 16\frac{2}{3}\%$ Ans.

(c) Cash Price = Rs.$25,000$

Down Payment = Rs.$10,000$

Payment in instalments = Rs.(500×36)

= Rs.$18,000$

Total Payment = Rs.$(10000 + 18,000)$ = Rs.$28,000$

Additional Payment = Total Payment − Cash Price.

= Rs.$(28000 - 25,000)$ = Rs.3000 Ans.

Percentage of Cash Price = $\frac{3000}{25000} \times 100 = 12\%$ Ans.

Q.2- Pervaiz buys a window air-conditioner at Rs.900. He pays 20% deposit and the outstanding balance plus markup in 48 months. Markup on the balance is charged at 10%. Find

(i) the cost of his monthly instalment;

(ii) the amount he saves by paying cash.

Solution:-

Cash Price = Rs.900

Cash Payment = 20% of Rs.900

$= \frac{20}{100} \times 900 =$ Rs.180

Remaining amount = Rs.720, Time = 4 years.

Mark up = $\frac{720 \times 10 \times 4}{100} = 288$

Total amont to be paid = Rs.$(720 + 288)$ = Rs.1008

Payment in each instalment

$= \frac{1008}{48} =$ Rs.21 Ans.

Total Payment = Rs.$(180 + 1008)$ = Rs.1188

By Paying Cash Price, he can save.

= Rs.$(1188 - 900)$

= Rs.288 *Ans.*

Q.3- On each of the following

(i) find the financial price of the goods and

(ii) express the amount saved by paying cash as a percentage of the cash price

	Item	Cash Rs.	Deposit	Number of Instalments	Monthly Instalments Rs
(a)	Computer	Rs.200	10%	24	Rs.9
(b)	Printer	Rs.450	15%	18	Rs.25
(c)	Scanner	Rs.1600	25%	30	Rs.52

Solution:-

(a) Cash Price of Computer = Rs.200

Deposite $10\% = \frac{10}{100} \times 200 =$ Rs.20

Payment by instalments = $24 \times 9 =$ Rs.216

Total Payment = Rs.$(20 + 216) =$ Rs.236

Payment More than Cash Price = Rs.$(236 - 200) =$ Rs.36

Percentage $= \frac{36}{200} \times 100 = 18\%$ Ans.

(b) Cash Price of Printer = Rs.450

Cash deposite @$15\% = \frac{15}{100} \times 450 =$ Rs.67.50

Payment in instalments = Rs.$(25 \times 18) =$ Rs.450

Total Payment = Rs.$(450 + 67.50) =$ Rs.517.50

Amount paid more than cash price $= (517.50 - 450)$

= Rs.67.50

%age $= \frac{67.50}{450} \times 100 = 15\%$ Ans.

(c) Cash Price of Scanner = Rs.1600

Cash deposite @$25\% = \frac{25}{100} \times 1600 =$ Rs.400

Payment in instalments $= \text{Rs.}(52 \times 30) = \text{Rs.}1560$

Total Payment $= \text{Rs.}(400 + 1560) = \text{Rs.}1960$

Extra Payment $= \text{Rs.}(1960 - 1600) = \text{Rs.}360$

$$\%age = \frac{360}{1600} \times 100 = 22.5\% \text{ Ans.}$$

Q.4- For each of the following, find

(i) the monthly instalment and

(ii) the difference in the hire purchase price and the cash price as a percentage of the cash price:

	Cash Rs.	Hire-purchase terms
(a)	Rs.800	Rs.100 deposit; balance 8%; 1 year
(b)	Rs.8000	Rs.200 deposit; balance 10% $2\frac{1}{2}$ year
(c)	Rs.1200	Rs.200 deposit; balance 15% $1\frac{1}{3}$ year

Solution:-

(a) Cash Price $= \text{Rs.}800$

Cash Payment $= \text{Rs.}100$

Balance $= \text{Rs.}(800 - 100) = \text{Rs.}700$

Mark up rate $= 8\%\ P.A$

Time $= 1$ year.

$$\text{Mark up amount} = \frac{700 \times 8 \times 1}{100} = 56$$

Total amount to be paid in 12 monthly instalments $= \text{Rs.}700 + \text{Rs.}56 = \text{Rs.}756$

$$\text{Payment of each instalments} = \text{Rs.}\frac{756}{12} = \text{Rs.}63 \text{ Ans.}$$

Difference of hire purchase price and cash price $= \text{Rs.}56$ Ans.

$$\%age = \frac{56}{800} \times 100 = 7\% \text{ Ans.}$$

(b) Cash Price = Rs.8000

Cash Payment = Rs.200

Balance = Rs.(8000 - 200) = Rs.7800

Mark up rate = 10%

$$\text{Amount mark up} = \frac{7800 \times 10 \times 2.5}{100} = \text{Rs.}1950$$

Total amount to be paid = Rs.(7800 + Rs.1950) = Rs.9750

Number of instalments = 2.5×12 = Rs.30

$$\text{Payment in each instalment} = \frac{9750}{30} = \text{Rs.}325 \text{ Ans.}$$

Now mark up = Rs.11950

$$\%\text{age of cash price} = \frac{1950}{8000} \times 100 = 24.75\% \text{ Ans.}$$

(c) Cash Price = Rs.1200

Cash Payment = Rs.200

Balance = Rs.(1200 - 200) = Rs.1000

Mark up rate = 15%

$$\text{Time} = 1\frac{1}{3} \text{ years} = \frac{4}{3} \text{ years}$$

$$\text{Amount of mark up} = \frac{1000 \times 15 \times \frac{4}{3}}{100} = \text{Rs.}200$$

Total amount to be paid in instalments

= Rs.(1000 + Rs.200) = Rs.1200

$$\text{Number of instalments} = 1\frac{1}{3} \times 12 = 16 \text{ instalments}$$

$$\text{Each instalment} = \frac{1200}{16} = \text{Rs.}75$$

Now mark up = Rs.200

$$\%\text{ age of cash price} = \frac{200}{1200} \times 100 = 16\frac{2}{3}\% \text{ Ans.}$$

Q.5- **The cash price of a computer package deal was Rs.3200. Markup paid @ 15% down payment and the outstanding balance plus markup over 24 months. Markup on the balance was charged at 9.5%.**

(i) Find the cost of the package deal if it is bought on hire-purchase.

(ii) Find the difference between the hire-purchase price and the cash price.

(iii) Express the difference obtained in (ii) as a percentage of the cash price.

Solution:- Cash Price $= \text{Rs.}3200$

$$\text{Down Payment} = 15\% \text{ of } 3200$$

$$= \frac{15}{100} \times 3200 = \text{Rs.}480$$

$$\text{Balance} = \text{Rs.}(3200 - 480) = \text{Rs.}2720$$

$$\text{Time} = 24 \text{ months} = 2 \text{ years}$$

$$\text{Rate of mark up} = 9.5\%$$

$$\text{Amount of mark up} = \frac{9.5}{100} \times 2720 \times 2 = \frac{95}{100} \times 272 \times 2$$

$$= \frac{19}{20} \times 272 \times 2 \quad = \frac{19}{10} \times 136 \times 2$$

$$= 258.40 \times 2 \quad = \text{Rs.}516.80$$

$$\text{Total amount to be paid} = \text{Rs.}(2720 + 516.80)$$

$$= \text{Rs.}3236.80$$

$$\text{Number of instalments} = 24$$

$$\text{Amount of each instalment} = \frac{3236.80}{24} = \text{Rs.}134.87$$

$$\text{Difference of two prices} = \text{Mark up} = \text{Rs.}516.80 \text{ Ans.}$$

Cost of package if bought on hire purchase

$$= \text{Cash price} + \text{Mark up}$$

$$= \text{Rs.}(3200 + 516.80) = \text{Rs.}3716.80 \text{ Ans.}$$

$$\%\text{age of Mark up} = \frac{516.80}{3200} \times 100 = 16.15\% \text{ Ans.}$$

Review Exercise 4

Q.1- Encircle the correct answer.

(i) An instrument for payment order issued by a bank on the request of its customers is called:

(a) pay order (b) cheque
(c) bank draft (d) bill of exchange

(ii) The person or entity whose insurance is being done is called the:

(a) insurer (b) insured
(c) drawer (d) lessee

(iii) The company undertaking the act of insurance is called:

(a) insurer (b) insured
(c) insurance (d) insurance policy

(iv) The periodic instalment to be paid by the insured is called:

(a) bonus (b) discount
(c) premium (d) mark up

(v) The return earned by the bank on loan is named as:

(a) mark up (b) premium
(c) bonus (d) profit

(vi) The amount which is paid by the bank on the deposits is called:

(a) profit (b) bonus
(c) premium (d) mark up

(vii) The percentage of profit/markup charged is called:

(a) rate (b) time
(c) interest (d) principal

(viii) A machine installed by the bank to dispense cash to customer is called an:

(a) computer (b) scanner
(c) ATM (d) card reader

(ix) A bill of exchange drawn on a specified banker and not expressed to be payable otherwise then on demand is called:

(a) cheque *(b)* pay order

(c) bill of exchange *(d)* bank draft

(i) a	*(ii) b*	*(iii) a*	*(iv) c*	*(v) a*
(vi) a	*(vii) a*	*(viii) c*	*(ix) a*	

Q.2- Fill in the blanks.

(i) A bill of exchange drawn on a specified banker and not expressed to be payable otherwise then on demand is called a _____

(ii) An instrument like a cheque, issued by bank on the request of its customers is called_____

(iii) A machine installed by the bank to dispense cash to customers is called an_____

(iv) The amount which is paid by the bank on the deposits maintained by the client with the bank is called_____

(v) The percentage of profit charged is called_____

(vi) The period of the loan or deposit is called the_____

(vii) The return earned by the bank on loan is named as___

(viii) The periodic installment to be paid by the insured is called_____

(ix) The company undertaking the act of insurance is called the_____

(x) The person or entity whose insurance is being done is called the_____

(i) Cheques	*(ii) Pay order*	*(iii) ATM*	*(iv) Profit*
(v) Rate	*(vi) Time*	*(vii) Mark up*	*(viii) Premium*
(ix) Insurer	*(x) Insured*		

Q.3- Raheel insured his house worth Rs.75,00,000 @ 2% of 5 years. Calculate the amount paid in 5 years, while the rate of depreciation is 10% yearly.

Solution:-

$$\text{Amount of Policy} = \text{Rs.}75,00,000$$

$$1st \text{ Premium } @2\% = \frac{2}{100} \times 75,00,000 \quad = \text{Rs.}1,50,000 \ldots(i)$$

After one year

$$\text{Depreciation } @10\% = \frac{10}{100} \times 75,00,000 \quad = 7,50,000$$

$$\text{New value} = \text{Rs.}(75,00,000 - 7,50,000) \quad = \text{Rs.}67,50,000$$

$$2nd \text{ Premium } @2\% = \frac{2}{100} \times 67,50,000 \quad = \text{Rs.}1,35,000 \ldots(ii)$$

After 2 years

$$\text{Depreciation } @10\% = \frac{10}{100} \times 67,50,000 \quad = \text{Rs.}6,75,000$$

$$\text{New Price of house} = \text{Rs.}(67,50,000 - 6,75,000)$$

$$= \text{Rs.}60,75,000$$

$$3rd \text{ Premium } @2\% = \frac{2}{100} \times 60,75,000 \quad = \text{Rs.}1215,00 \ldots(iii)$$

After 3 years

$$\text{Depreciation } @10\% = \frac{10}{100} \times 60,75,000 \quad = \text{Rs.}6,07,500$$

$$\text{Depreciated Value} = \text{Rs.}(60,75,000 - 6,07,500)$$

$$= \text{Rs.}54,67,500$$

$$4th \text{ Premium } @2\% = \frac{2}{100} \times 54,67,500 = \text{Rs.}109350 \ldots(iv)$$

$$5th \text{ Premium} = 0$$

Total amount paid =

$$= \text{Rs.}(1,50,000 + 1,35,000 + 1,21,500 + 109350)$$

$$= \text{Rs.}515850 \text{ Ans.}$$

Q.4- Naeem insured his factory @ 3% for 3 years. With depreciation rate 5% yearly. If first premium is Rs.21,000, find the worth of the factory. If he got a claim of Rs.200,000 after two years, how much benefits did he get?

Solution:-

$1st$ Premium $@3\% =$ Rs.$21,000$

3% of worth of factory $=$ Rs.$21,000$

$\frac{3}{100}$ of worth of factory $=$ Rs.$21,000$

Worth of factory $= 21,000 \times \frac{100}{3}$

$=$ Rs.$7,00,000$

After one year

Depreciation $@5\% = \frac{5}{100} \times 7,00,000$

$=$ Rs.$35,000$

Depreciated Value $=$ Rs.$(7,00,000 - 35,000)$

$=$ Rs.$6,65,000$

$2nd$ Premium $@3\% = \frac{3}{100} \times 6,65,000$

$=$ Rs.19950

$3rd$ Premium $= 0$

Total amount paid as Premiums $=$

$=$ Rs.$(21000 + 19950)$

$=$ Rs.40950

Amount of claim $=$ Rs.$2,00,000$

Benefit to $= 200,000 - 40950 =$ Rs.$159,050$ Ans.

Q.5- **M/s Rahim printer purchases under hire-purchase system a machine from Lahore company on 1st January 2000, paying cash Rs.10,000 and agreeing to pay three further instalments of Rs.10,000 each on 31st December every year. The cash price of the machine is Rs. 37,250 and the Lahore company charges markup at 5% p.a. Draw table showing installments (Principal + Markup).**

Solution:-

			Instalments	
S.No	*Date of Payments*	*Cash Price*	*Mark Up*	*Princepal*
1	*Down Payment on 1-1-2000*	37,250 10,000 27,250	*Zero*	10,000
2	*Less Paid on 31-12-2000*	27,250 8638 18,612	$27250 \times \frac{5}{100}$ $= 1362$	8638
3	*Less Paid on 31-12-2001*	18,612 9070 9542	$18612 \times \frac{5}{100}$ $= 930$	9070
4	*Less Paid on 31-12-2002*	9542 9542 *Nill*	458 Rs.2750	9542 37250

MULTIPLE CHOICE QUESTIONS

Tick the best choice.

(i) (PLS) Saving account was introduced in

(a) Jan.*1980* *(b)* Jan.*1981*

(c) Jan.*1982* *(d)* Jan.*1983*

(ii) A negotiable instrument means
(a) Promissory note (b) Bill of exchage
(c) Cheque (d) All of these

(iii) If *1* Riyal = Rs.*22.400* , Then *Rs.44800* is equal to
(a) *200* Riyals (b) *2000* Riyals
(c) *1900* Riyals (d) *2100* Riyals

(iv) If one dollar = Rs.*84.100*, Then *Rs.150* dollars is equal to
(a) *Rs.12610* (b) *Rs.12615*
(c) *Rs.12620* (d) *Rs.12620*

(v) In Islamic Banking, The words Profit or Markup have been replaced with
(a) Benefit (b) Loss
(c) Interest (d) Incriment

(vi) Simple interest, for the investment of *Rs.1000* for *2* years @ *10%* per anum, is
(a) *Rs.100* (b) *Rs.200*
(c) *Rs.300* (d) *Rs.250*

(vii) Compound Profit + Princpal =

(a) $\text{Principal}\times\left[1+\frac{\text{Rate}}{100}\right]^{\text{Time}}$

(b) $\text{Principal}\times\left[1+\frac{\text{Time}}{100}\right]^{\text{Rate}}$

(c) $\text{Principal}\times\left[1-\frac{\text{Rate}}{100}\right]^{\text{Time}}$

(d) $\text{Principal}\times\left[1-\frac{\text{Time}}{100}\right]^{\text{Rate}}$

(viii) The time period agreed upon by both the Parities of insurance is called.
(a) Time (b) Maturity
(c) Rate (d) Premium

(ix) A car of price *Rs.12,50,000* is insured at the rate of *4.50%* P.A for five years. The premium for *5th* year is

(a) 39237 (b) 38217
(c) Zero (d) 39927

(x) The Periodic instalment to be paid by the insured is called

(a) Markup (b) Profit
(c) Insurence (d) Premium

(xi) The bank account having high value of liquidity is termed as.

(a) PLS Account (b) Saving Account
(c) Current Account (d) Foreign Currency Account

(xii) The return earned by the bank is named as

(a) Mark up (b) Interest
(c) Profit (d) Premium

MODEL CLASS TEST

Time : 40 mins Max Marks : 25

Q.1- Tich the best choice.

(i) If *1* Riyal = Rs.*22.300* , Then *1500* Riyal is equal to

(a) *Rs.33250* (b) *Rs.33350*
(c) *Rs.33450* (d) *Rs.33550*

(ii) If *1* Dollar = Rs.*85.200* , Then *Rs.12780* is equal to

(a) *1400* Dollars (b) *1500* Dollars
(c) *1600* Dollars (d) *1700* Dollars

(iii) The amount overpaid by the bank is called

(a) Mark up (b) Profit
(c) Interest (d) Principal

(iv) The return earned by the banks on loan is named as

(a) Profit (b) Mark up
(c) Interest (d) Principal

(v) Amount can be drawn from any branch of a bank, in case of

(a) Current Account (b) PLS Account

(c) Pay order (d) On line banking

(vi) If a car is insured for three years @ *3%* Then the third Premium is

(a) @ 1% *(b) @ 2%* *(c)* Zero *(d) @ 3%*

(vii) The time agreed by both the parties of an insurance policy is called.

(a) Time *(b)* Period *(c)* Maturity *(d) Rate*

Q.2- Attempt any five short question.

(i) Define "Negotiable Anstrument". What are its kinds?

(ii) If the simple profit on Rs.*640* for *12* years is Rs.*384*. Find the rate of profit.

(iii) Find Compound Profit on Rs.*4000* at *5%* p.a for *3* years.

(iv) Ali bought an insurance policy against his car @ *3.25* for *3* years. He paid Rs.*26000* as 1st premium. Find the price of the car.

(v) Define the terms "Insurance Policy", Premium, bonus.

(vi) Convert *5,00,000* PKR into Euro if
If *1* Euro = *112.4088* PKR

(vii) Find simple Mark up on loan of Rs.*1,00,000* for *3* years @ *10%* p.a.

Attempt any two questions of the following.

Q.3- Find the Compound Profit of Rs.5000 @ 6% p.a, For 2 years compounded half yearly.

Q.4- Ahmad insured his house worth Rs.75,00,000 @ 2% for 4 years. Find the total amount paid in 4 years while depreciation is @ 10% yearly.

Q.5- Amjad Purchased a truck on hire Purchase for Rs.56,000 under the conditions.

Each instalment = Rs.1500

Rate of mark up = 5% p.a

Make a table of instalments.